
Introduction

The Electronic Switched Network (ESN) is a private communications network intended for use by large business customers with distributed operating locations. See *Electronic Switched Network description* (309-3001-100).

This document describes the major transmission considerations that must be taken into account when planning an ESN network. The ESN transmission objective is to provide transmission quality comparable to public network calling. While this objective can easily be met for on-network calls, it is unreasonable to meet this objective for tandem combinations of public and private network trunks, because this produces a connection with inherently poorer performance. However, the sacrifice in performance should be small enough to be unnoticeable or at least tolerable. Noticeably poorer performance leads to an excessive number of calls placed by manually initiated bypass routing through the Direct Distance Dialing (DDD) network.